

Notice of Allowability

Application No.

10/804,672

Examiner

Naheed Ejaz

Applicant(s)

EARLS ET AL.

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12 October 2007.
2. ☒ The allowed claim(s) is/are 1 and 3-5.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Matthew D. Rabdau (Reg. No. 43,026) on November 07, 2007.

The Application has been amended as follows:

In the claims:

- Claim 1, "receiver of the type that converts" (line 1) has been amended to ---receiver that converts---.
- Claim 1, "the frequency by a variable amount" (line 8) has been changed to ---the frequency of the wideband IF signal by a variable amount---.
- Claim 1, "data for a frequency" (line 13) has been amended to ---data for use in a frequency---.

Reasons for Allowance

2. Claims 1, 3-5 are allowed.
3. The following is an examiner's statement of reasons for allowance:
4. With respect to claims 1, 3 & 4: the prior art of records fail to teach or fairly suggest an instrumentation receiver that converts a wideband RF signal to a wideband

IF signal comprising: a narrowband IF channel comprising a frequency offsetting conversion stage having the wideband IF signal as an input to offset the frequency of the wideband IF signal by a variable amount; a narrow band filter, filtering the frequency offset wideband IF signal to produce a narrowband IF signal offset within the original wideband IF signal; and an analog to digital converter sampling the narrowband IF signal at a relatively slow sample rate with a high resolution to provide the high dynamic range signal data for use in a frequency trigger function as recited in an independent claim 1 and in combination with other elements of the claim.

5. With respect to claim 5, the prior art of records fail to teach or fairly suggest a method of processing a wideband signal to provide high dynamic range sampled data for use in a frequency trigger function comprising the steps of: sampling the wideband signal output from the wideband channel at a high sample rate with a relatively low resolution to provide wideband signal acquisition data; varying a frequency offset in the narrowband channel to cover a desired subsection of the wideband signal; narrowband filtering the frequency offset wideband signal to provide a narrowband signal from the wideband signal; and sampling the narrowband signal output from the narrowband channel at a relatively low sample rate with a high resolution to provide the high dynamic range sampled data.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naheed Ejaz whose telephone number is 571-272-5947. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Naheed Ejaz
Examiner
Art Unit 2611

11/14/2007

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CHIEH M. FAN
SUPERVISORY PATENT EXAMINER